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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,340	11/25/2003	Qinggang Zhou	VIM-002	6545
47713	7590	06/29/2006	EXAMINER	
SILICON EDGE LAW GROUP LLP 6601 KOLL CENTER PARKWAY, SUITE 245 PLEASANTON, CA 94566			HSIA, SHERRIE Y	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/722,340	Applicant(s) ZHOU ET AL.	
	Examiner Sherrie Hsia	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-13 and 16-21 is/are rejected.
- 7) ☒ Claim(s) 9, 10, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 1125 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/25/03</u> . | 6) <input type="checkbox"/> Other: ____. |

TAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "motion history buffer" as claimed in claims 2 and 17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

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pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 11-13, 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Sezan (5473383).

As to claims 1, 5 and 6, Sezan discloses the claimed subject matter, the claimed examining a block of pixels of the field and determining whether the pixels of the block exhibits a motion characteristic is met by the paragraphs 3-6 of column 5 and paragraphs 1-4 of column 6, the claimed performing temporal interpolation to generate interline gap pixels for the block if the pixels of block is determined not to exhibit the motion characteristic and performing a spatial interpolation to generate the interline gap pixels for the block if the pixels of the block are determined to exhibit the motion is met by paragraphs 2, 4, 5 of column 5 and paragraph 5 of column 6 and the claimed repeating is met by column 5 line 53-column 9 line 26 (Figs. 4-7, abstract, column 1 lines 25-30, columns 5-9).

As to claim 2, the claimed limitation is disclosed by Sezan (Fig. 5, column 5 line 58-column 8 line 64).

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As to claim 3, the claimed limitation is disclosed by Sezan (column 9 lines 17-19).

As to claim 4, the claimed limitation is disclosed by Sezan (column 5 lines 64-column 8 line 25).

As to claims 7 and 8, Sezan discloses the claimed subject matter, the claimed analyzing one of the blocks and determining whether the block exhibits a motion characteristic is met by the paragraphs 3-6 of column 5 and paragraphs 1-4 of column 6, the claimed using a first interpolation method to generate interline gap pixels for the block if the block is determined to exhibit the motion characteristic and otherwise using a second interpolation method to generate the interline gap pixels for the block is met by paragraphs 2, 4, 5 of column 5 and paragraph 5 of column 6 (Figs. 4-7, abstract, column 1 lines 25-30, columns 5-9).

As to claims 11 and 12, the claimed limitation is disclosed by Sezan (column 5 line 53-column 9 line 26).

As to claims 13, 16 and 18-21, Sezan discloses the claimed subject matter, the claimed memory and memory controller is met by two field storage, reduced capacity line buffer 501 (Fig. 7) and the claimed block-based motion detection and deinterlacing circuitry is met by the blocks 501, 502 and 503 (Fig. 7, column 5 line 15-column 9 line 26) (Figs. 4-7, abstract, column 1 lines 25-30, columns 5-9).

As to claim 17, the claimed limitation is disclosed by Sezan (Fig. 5, column 5 line 58-column 8 line 64).

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Allowable Subject Matter

4. Claims 9, 10, 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant is informed that claims 1-8, 11-13, 16-21 are also anticipated by Sezan (5521644). The examiner did not apply any additional rejection to so as not to be exhaustive and repetitive.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrie Hsia whose telephone number is (571) 272-7347.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450

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Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is (571) 272-1000.


Sherrie Hsia
Primary Examiner
Art Unit 2622

SH
June 26, 2006